

## DOCUMENT RESUME

ED 459 359

CE 082 747

AUTHOR Brown, Bettina Lankard  
TITLE Return on Investment in Training. Myths and Realities.  
INSTITUTION ERIC Clearinghouse on Adult, Career, and Vocational  
Education, Columbus, OH.  
SPONS AGENCY Office of Educational Research and Improvement (ED),  
Washington, DC.  
REPORT NO No-16  
PUB DATE 2001-00-00  
NOTE 4p.  
CONTRACT ED-99-CO-0013  
AVAILABLE FROM For full text: <http://www.ericacve.org/pubs.asp>.  
PUB TYPE ERIC Publications (071)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS Adult Education; Corporate Education; \*Cost Effectiveness;  
Education Work Relationship; Employer Attitudes; Employer  
Employee Relationship; \*Job Training; Labor Force  
Development; \*Outcomes of Education; \*Productivity; Resource  
Allocation; Staff Development; Vocational Education; \*Wages  
IDENTIFIERS \*Return on Investment

## ABSTRACT

Changes in the economy and declining profit margins are prompting many businesses to question the value of their training investments. Companies that had been operating under the assumption that they were reaping positive benefits from their training efforts are asking their human resource managers to provide proof that their training programs are resulting in positive returns. Cost/benefit analysis is one means of evaluating training returns because it provides evidence of bottom-line profits. If the reasons for evaluating training are to ensure a correlation between training and a specific outcome, this highest level of evaluation may be required. However, if the reason for training is to improve soft-data areas such as customer satisfaction, employee morale, and so forth, other methods, such as surveys and interviews, may provide the evidence required to support training. The literature has enough evidence to support the position that investment in training results in positive returns. The nature of these returns may vary among organizations and workers, but it is important to remember that wages and productivity are not the only variables guiding a company's investment in training. (Contains 17 references.) (YLB)

Return on Investment in Training  
Myths and Realities No. 16

Bettina Lankard Brown

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

---

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ERIC Clearinghouse on Adult, Career, and Vocational Education  
Center on Education and Training for Employment  
College of Education  
The Ohio State University  
1900 Kenny Road  
Columbus, OH 43210-1090

BEST COPY AVAILABLE

## Return on Investment in Training

Training and development efforts are big business in the United States, with the amount of money spent increasing yearly. However, changes in the economy and declining profit margins are prompting many businesses to question the value of their training investments. Do businesses benefit from their expenditures on employee training or are they merely preparing their workers for jobs elsewhere? When workers bear the costs of such training, do they realize personal benefits or does the employer reap the only rewards? This publication examines myths and misconceptions about who pays and who reaps the return on investment (ROI) in training.

### Investments in Training Are Assumed to Have Positive Returns

For years, companies have been operating under the assumption that they are reaping positive benefits from their training efforts. They train workers because they believe it strengthens the organization and serves as a retention tool (Lachnit 2001). They accept training as a given expense, showing human capital investments as expenditures on their corporate balance sheets, not as assets that are expected to generate income. However, because intuition and casual estimates have formed the basis of many of their training investment decisions, many companies have little evidence to verify that they are realizing positive returns on these investments.

This practice of operating from an underlying belief in the value of training is not unique to the United States. A study of 15 countries in the Organization for Economic Cooperation and Development found that the majority of enterprises believe employee training is responsible for "productivity improvements, greater workforce flexibility, savings on material and capital costs, improved quality of the final product or service, and a more motivated workforce" (National Centre for Vocational Education Research 2001, p. 1). However, many companies have not measured the benefits and related them to the cost of training in a way that reveals the rate of return on a firm's investment (*ibid.*). Apparently there is no other workplace issue on which so much money is spent with as little accountability as training (Worthen 2001).

In today's competitive and economically volatile market, business managers can no longer approve spending without substantial justification to support their spending decisions. They are asking their human resource managers to provide proof that their training programs are resulting in positive returns or to face budget cuts. "By attempting to measure that value—by any means—we can't help but promote its existence" (Goldwasser 2001, p. 90).

### Cost/Benefit Analysis Is the Only Way to Substantiate ROI

With increased pressure to justify their expenditures on training, human resource personnel are looking for ways to show improved bottom-line results from employee training investments. However, it is difficult to show a direct correlation between training and changes in sales volume, productivity, and other profit measures because there are many factors, besides training, that can influence changes in sales, productivity, and profit (Blandy et al. 2000). "Even a company like Xerox Corporation, which invests considerable monies in sales training, treads cautiously around claims of a dollars-and-cents return on investment" (Keenan 2000, p. 23).

One of the problems with measuring training's influence on worker productivity is that there are many areas of productivity that are

intangible and difficult to quantify, such as ideas, abilities, experience, insight, motivation, and so forth (Cross 2001). Because evaluation methods can be expensive and time-consuming, determining the level of complexity desired for measurement and evaluation of training is a big decision.

The literature contains many references to Kirkpatrick's model for measuring training and performance. Levels 1, 2, and 3, as identified by Kirkpatrick, measure reaction, learning, and behavior, respectively. Level 4, the highest level, measures results through financial analysis (Willyerd 1997). Measuring all programs at this highest level is not necessary, according to many analysts. "Only programs that address a high-risk business issue or have the greatest impact on the bottom line should receive this level of evaluation" (Purcell 2000, p. 32). For many organizations, measures of customer satisfaction, work climate, attendance, and morale may be sufficient to justify training expenses. And these measures can be easy and inexpensive for businesses to create, administer, tabulate, and interpret (Bregman and Jacobson 2000).

Organizations that are committed to putting forth the time, money, and effort required to ensure that training results are connected to a business need and result in a monetary benefit can employ several methods for doing this. One is to examine the consequences of not training; another is to analyze performance records. Probably the best-known method is a cost/benefit analysis, which can show the extent to which their training programs result in observable, measurable behavior that contributes to the bottom line (Rowden 2001). Lachnit (2001) presents five steps for measuring ROI (pp. 53-54):

1. Obtain data to demonstrate the changes in behavior, e.g., that gathered through surveys, questionnaires, on-the-job observations, post-program interviews, focus groups, performance monitoring.
2. Isolate the effect of training, e.g., through the use of control groups, trend lines, forecasting models.
3. Convert the data to monetary value by focusing on a unit of measure, determining a value for that unit, calculating the change in performance data, determining the annual amount for the change, and calculating the total value of the improvement.
4. Tabulate the program costs: this is the value of the cost of taking people away from their jobs for the training, including salary and benefits.
5. Calculate the return on investment by dividing the net benefits by the costs times 100 percent.

When performed properly, studies of returns on investment can provide substantive information upon which to base training support. Doucouliagos and Sgro (2000) report that a study of the returns on training investments made by seven Australian work organizations shows that there are substantial financial rewards from a well-designed training program. The organizations in the study realized returns ranging from 30 to 7,000 percent.

### General Training Improves Productivity More than Specific Training Does

Although companies may be leery of providing general training because it improves the worker's potential for securing employment elsewhere, it has proven to have a greater effect on worker productivity than does specific training. Barrett and O'Connell (2001) used data from surveys of enterprises in Ireland to estimate the productivity effects of general training, specific training, and all types of training combined. They found that, although statistically signifi-

cant positive outcomes were realized for general and all types of training, this was not true for specific training. Survey data from Scottish workers participating in lifelong learning programs showed that investment in these programs likewise results in positive benefits from general training (Pate et al. 2000). Reported results include increases in an employee's psychological commitment to the organization, job satisfaction, and knowledge transfer.

Researchers who conducted case studies of three Australian firms found different results (Blandy et al. 2000). "Enterprise returns to training can be exceptionally high, especially for training that is highly specific, rapidly accomplished, and related to the introduction of new technology or working patterns. Such training pays a firm, even if labour turnover is high" (p. ix).

Possibly, the underlying factor influencing the returns on investment for all types of training is that each type has a different effect on productivity. The Institute of Personnel and Development ("What Makes Training Pay?" 1997) separates training into two camps: "pay back" and "pay forward." "Pay back" requires a measurable financial return. "Pay forward" looks at benefits that will occur down the line, e.g., better team or individual behavior, better staff identification with company objectives. Whatever the method of calculating return on investment for the various types of training, one caveat is supported by the literature: The impact of training tends to vary positively with the level of capital investment when the training is conducted properly and related to identified needs.

### **Employee Benefits from Training Are Evidenced in Increased Wages**

The correlation between wage growth and training is weak. Employers tend to pay lower starting wages to workers who require more training. Thus, even though these workers realize the full rewards when their wages increase after training, they have, in fact, "paid" for their training by accepting an initial lower starting salary than other workers who require less training (Barron et al. 1999). However, just as increasing productivity is not the only reason businesses train their workers, increased wages are not the sole reason workers seek training.

Training empowers workers. Employees who receive training through a business's commitment to employee development are better able to manage their own career development, become self-starters, and retain a sense of self-worth ("What Makes Training Pay?" 1997). They also reap personal benefits from employer-provided training. Workplace literacy programs, for example, have shown to increase workers' productivity at home as well as the workplace and help them to be contributing members of the communities in which they live (Sticht 1999).

### **Training Requires a Partnership**

To be successful, training must be targeted toward a business need—the solution of a problem that improves productivity, behavior, and so forth. This is not an effort that training managers can do in isolation. Training managers and business unit managers must agree first on the problem and then on the value of solving it (Cross 2001). Trainers and managers must agree that the training is a worthwhile endeavor and that performance can be tracked and reported to show measurable outcomes to training.

LensCrafters tested a link between training and key business drivers by looking at quality outcomes, store performance and sales, training saturation, and customer satisfaction. "Results showed that all stores in the test regions reduced waste, increased sales, and improved in all five customer satisfaction areas" (Purcell 2000, p. 31). By proving that there was a correlation between the highest level of training saturation and the most improved business results, the training department verified its importance as a strategic partner in management's efforts.

### **Conclusion**

Whatever the size of a company, in today's economy there must be justification for any expenditure on the balance sheet. Expenses cannot exceed income if a company is to survive. However, there are many ways to compare returns on investment. The cost/benefit analysis is one means of evaluating training returns because it provides evidence of bottom-line profits. If the reasons for evaluating training are to ensure a correlation between training and a specific outcome, this highest level of evaluation may be required. However, if the reason for training is to improve soft-data areas such as customer satisfaction, employee morale, and so forth, surveys, interviews, and other methods may provide the evidence required to support training. There is enough evidence in the literature to support the position that there are positive returns from investment in training. The nature of these returns may vary among organizations and workers, but it is important to remember that wages and productivity are not the only variables guiding a company's investment in training.

### **References**

Barrett, A., and O'Connell, P. J. "Does Training Generally Work? The Returns to In-Company Training." *Industrial and Labor Relations Review* 54, no. 3 (April 2001): 647-662.

Barron, J. M.; Berger, M. C.; and Black, D. A. "Do Workers Pay for On-the-Job Training?" *Journal of Human Resources* 34, no. 2 (Spring 1999): 236-252.

Blandy, R.; Dockery, M.; Hawke, A.; and Webster, E. *Does Training Pay? Evidence from Australian Enterprises*. Kensington Park, Australia: Australian National Training Authority, 2000. (ED 449 382) <<http://www.ncver.edu.au/research/proj/nr8010.pdf>>

Bregman, P., and Jacobson, H. "Yes, You Can Measure the Business Results of Training." *Training* 37, no. 8 (August 2000): 68-72.

Cross, J. "A Fresh Look at ROI." *Learning Circuits*, American Society for Training and Development, January 2001. <<http://www.learningcircuits.org/2001/jan2001/cross.html>>

Doucouliagos, C., and Sgro, P. *Enterprise Return on a Training Investment*. Leabrook, Australia: National Centre for Vocational Education Research, 2000. (ED 447 350) <<http://www.ncver.edu.au/research/proj/nr8021.pdf>>

Goldwasser, D. "Beyond ROI." *Training* 38, no. 1 (January 2001): 82-90.

Keenan, W., Jr. "Sales Training ROI?" *Industry Week* 249, no. 11 (June 12, 2000): 23.

Lachnit, C. "Training Proves Its Worth." *Workforce* 80, no. 9 (September 2001): 52-56.

National Centre for Vocational Education Research. *Returns to Companies on an Investment in Training*. Leabrook, Australia: NCVER, 2000. <<http://www.ncver.edu.au/research/papers/downloads/roi.pdf>>

Pate, J.; Martin, G.; Beaumont, P.; and McGoldrick, J. "Company-based Lifelong Learning: What's the Pay-off for Employers?" *Journal of European Industrial Training* 24, no. 2-4 (2000): 149-157.

Purcell, A. "20/20 ROI." *Training & Development* 54, no. 7 (July 2000): 29-33.

Rowden, R. W. "Exploring Methods to Evaluate the Return from Training." *American Business Review* 19, no. 1 (January 2001): 6-12.

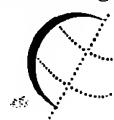
Sticht, T. G. *Adult Basic Education: Strategies to Increase Returns on Investment (ROI)*. July 1999. (ED 432672)

"What Makes Training Pay?" *Management Development Review* 10, no. 6 (1997): 225.

Willyerd, K. A. "Balancing Your Evaluation Act." *Training* 34, no. 3 (March 1997): 52-54, 56, 58.

Worthen, B. "Measuring the ROI of Training." *CIO* 14, no. 9 (February 15, 2001): 128-136.

This project has been funded at least in part with Federal funds from the U.S. Department of Education under Contract No. ED-99-CO-0013. The content of this publication does not necessarily reflect the views or policies of the U.S. Department of Education nor does mention of trade names, commercial products or organizations imply endorsement by the U.S. Government. *Myths and Realities* may be freely reproduced and are available at <<http://ericacve.org/fulltext.asp>>.





*U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)*



## **NOTICE**

### **Reproduction Basis**



This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").